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A New *Limenitis weidemeyerii* W. H. Edwards from Southeastern Arizona (Nymphalidae)

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Abstract. A new subspecies of *Limenitis weidemeyerii* is described from the Chiricahua Mountains of southern Arizona.

In their revision of *Limenitis weidemeyerii* W. H. Edwards, Perkins and Perkins (1967) noted that material from the Chiricahua Mountains in southeastern Arizona differed consistently from typical *L. w. angustifascia* (Barnes & McDunnough). Specimens collected recently by the junior author support this contention of distinctiveness; hence, the population is hereby designated:

Limenitis weidemeyerii siennafascia, new subspecies (Fig. 1)

Male (based on holotype and 26 topoparatypes). The dorsal surface is essentially identical with *angustifascia*. On the ventral surface, the new subspecies differs from other *weidemeyerii* by having relatively more red-brown ("chestnut" in Smithe, 1975) overscaling, especially just proximal to the postmedian white band of the secondaries. This area is usually black with no overscaling in *angustifasia*, although some specimens show some red-brown anteriorly. There also tends to be more red-brown overscaling on the subapical area of the primaries and broader whitish overscaling bordering the submarginal red-brown spots on the secondaries of *siennafascia*, although these characters are not consistent.

Female (based on allotype and 7 topoparatypes). The characters which distinguish males from other *weidemeyerii* subspecies are also diagnostic for females. The red-brown overscaling of the discal area of the ventral secondaries is even more extensive and prominent.

Size (measurements of right primary along costal margin to farthest extent of the apex). Holotype = 34.6 mm, male topoparatypes 31.7-36.4 mm, x all males = 33.8 mm (N = 24). Allotype = 37.9 mm, female topoparatypes = 37.6-40.1 mm, x all females = 38.3 mm (N = 7). The new subspecies averages smaller than *angustifascia* (male = 36.4 mm, female = 42.9 mm, from Perkins and Perkins, 1967).

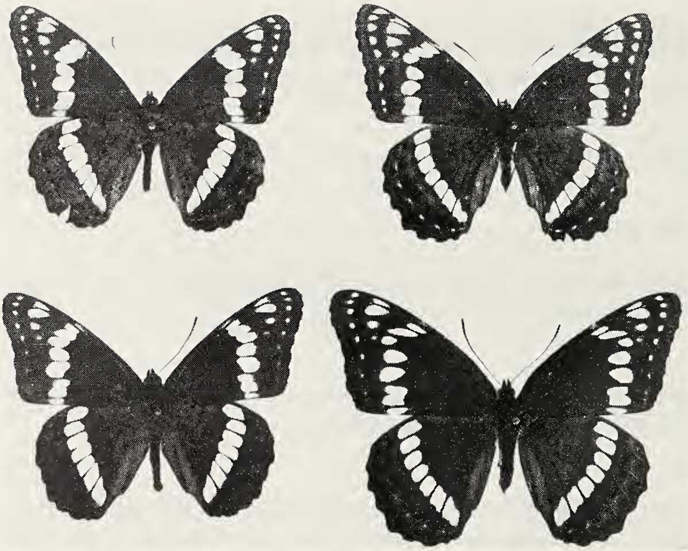

Fig. 1a. *Limenitis weidemeyerii* subspecies, dorsal surface. Left top: male *siennafascia*—holotype, bottom: male *angustifascia*—AZ: Coconino Co.; Oak Creek Canyon, ca. 6000′, 12 June 1979. Right top: female *siennafascia*—allotype, bottom: female *angustifascia*—AZ: Apache Co.; White Mts., Ditch Camp, 5 July 1980.

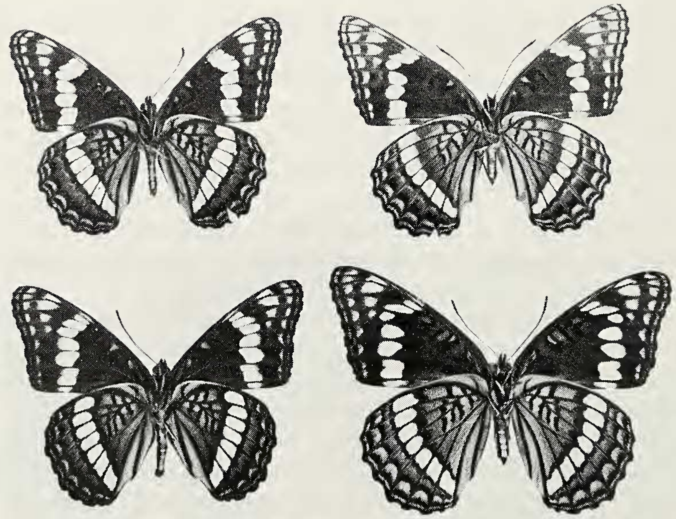

Fig. 1b. *Limenitis weidemeyerii* subspecies, ventral surface. Same specimens as Fig. 1a.

Types.[1] Holotype: S(outh)E(ast) A(ri)z(ona), Cochise Co(unty), Chiricahua M(oun)t(ain)s, n(ear) Barfoot P(a)rk, 8400′, June 14, 1981, leg. D. Mullins. Allotype: same data as holotype except July 13, 1980. Topoparatypes: 5♂♂ 1♀ with same data as holotype; 8♂♂ 6♀♀ with same data as allotype; 13♂♂ same data as holotype, except June 26, 1982.

Type Locality. ARIZONA: Cochise County; Chiricahua Mountains, near Barfoot Park, 8400′ (T17 S, R30E, S33). The north-facing slopes at this elevation are a Spruce-Fir association in which there are patches of Quaking Aspen (*Populus tremuloides*). The latter serves as the foodplant (*fide* K. Roever).

Deposition of type material. The holotype and allotype will be deposited in the type collection at the Allyn Museum of Entomology, Sarasota, Florida. Two ♂ and one ♀ topoparatypes are in the senior author's private collection. A pair each of topoparatypes will be deposited in the following museums: American Museum of Natural History, New York; Los Angeles County Museum; Smithsonian Institution, Washington, D. C.; and Instituto de Biologia, Mexico, D.F. The remaining topoparatypes are retained in the junior author's private collection.

Other specimens examined (All ARIZONA: Cochise Co.; Chiricahua Mountains). E. side Chiricahua Mts., Price Canyon, 15 July 1968, 2♂♂, 26 July 1975, 1♂, leg. ?; on road near Barfoot Park, 5 July 1981, 1♂ 1♀, 26 June 1982, 6♂♂, leg. M. Smith; Barfoot Park, 8000′, 19 June 1960, 2♂♂, 1 July 1961, 3♂♂, 12 July 1970, 3♂♂ 2♀♀, 3 July 1976, 3♂♂, leg. K. Roever; Barfoot Park, 3 July 1976, 1♂, leg. J. Werner; Pinery Canyon, 6950′, 3 July 1976, 1♂, leg. J. & S. Werner. Perkins and Perkins (1967) mention a number of additional localities from the Chiricahua Mountains. The new subspecies should be searched for in adjacent western New Mexico and northern Mexico.

Etymology. The name *siennafascia* describes the distinctive red-brown overscaling of the ventral surface and is in keeping with names proposed for other *weidemeyerii* phenotypes (e.g., ab. "sinefascia" Edwards, *angustifascia* and *latifascia* Perkins and Perkins).

Discussion

Limenitis weidemeyerii siennafascia is at once distinguished from all other *weidemeyerii* taxa by its relatively extensive red-brown overscaling on the ventral surface, especially on the secondaries of the female. Because of this, *siennafascia* shows no sharp demarcation in ventral pattern, whereas this surface in *angustifascia* is crisp and clear. Much of the overscaling seems to be rather quickly lost in flown individuals. The new subspecies tends to have more individuals with orange spotting on the dorsal secondaries (38% of the sample vs. 18% in *angustifascia*, Perkins and Perkins, 1967) and white in the cell of the dorsal primaries (57% vs. 33%). The presently known range of *siennafascia* in the Chiricahua Mountains is separated from other *weidemeyerii* populations by some 130 km to the northeast (Pinos Altos Mts., Grant Co., New Mexico) and by over 160 km to the north (Blue Range, Greenlee Co., Arizona).

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[1] Data as on specimen labels, parenthetical data clarify label data.

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Literature Cited

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